UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION
POSTAL SERVICE CENTER BOX 8003
CHERRY POINT, NORTH CAROLINA 28533-0003

AirStaO 3121.1A
AOPS
29 Mar 07

AIR STATION ORDER 3121.1A

From: Commanding Officer, Marine Corps Air Station Cherry Point
To: Distribution List

Subj: MARINE CORPS AIR STATION (MCAS) CHERRY POINT SPACE SHUTTLE SUPPORT PLAN (SSSP)

Ref: (a) DDMS Functional Plan 3610
(b) DDMS Procedures Document
(c) DDMS Turn Around Functional Plan 3611

Encl: (1) Plan Summary
(2) Basic Plan
(3) Task Organization
(4) Operations
(5) DoD ELS/LAS Operational Support Requirements
(6) Logistics Support Requirements
(7) Public Affairs
(8) Meteorology
(9) Command, Control and Communications Systems
(10) Security
(11) Medical Services
(12) Execution Checklist
(13) Air Traffic Control (ATC) Facility Manual (Section 3)

1. Situation. To provide procedures and responsibilities for implementation of the Marine Corps Air Station (MCAS) Cherry Point Space Shuttle Support Plan (SSSP) when directed by the Department of Defense Manned Space Flight Support (DDMS) Operations Order.

2. Cancellation. AirStaO 3121.1.

3. Mission. The Airfield Operations Department shall manage the MCAS Cherry Point Space Shuttle Support Plan per this Order. All MCAS Organizational Departments and Commands shall be familiar and comply with the provisions of this plan.

4. Execution

a. Commander's Intent. The Airfield Operations Officer, under the direction of the Director, Operations, is the duly authorized representative of the Commanding Officer for

providing emergency landing contingency services for the Space Shuttle Orbiter Vehicle and astronauts in accordance with the references.

b. Concept of Operations. Enclosures (1) through (13) set forth detailed instructions and procedures for providing emergency landing contingency services. All department organizations and commands shall comply with the provisions of this plan.

5. Administration and Logistics. This Order is published electronically and can be accessed via MCAS Cherry Point Station Adjutant's website.

6. Command and Signal

a. Command. This Order is applicable to Marine Corps Air Station Cherry Point.

b. Signal. This Order is effective the date signed.

R. C. MANN
Acting

DISTRIBUTION: A

PLAN SUMMARY

1. Purpose. This plan provides procedural guidance for MCAS Cherry Point support of a Space Shuttle contingency during pre-launch, launch, or emergency landing. The SSSP implements the procedures outlined in the DDMS Procedures Document. The SSSP, in conjunction with the DDMS Functional Plan, outlines how MCAS Cherry Point will receive forces in response to the Space Shuttle landing at MCAS Cherry Point, North Carolina. It provides guidance for station support personnel by setting forth specific responsibilities. This plan also informs potential incoming forces of station capabilities and limitations so that pre-execution planning may be accomplished.

2. Execution. MCAS Cherry Point will provide emergency support for all Space Shuttle launch inclinations that make Cherry Point a viable Emergency Landing Site (ELS). The Department of Defense (DoD) Manager, Manned Space Flight Support Operations will task MCAS Cherry Point via an Operation Order not later than 30 days prior to scheduled launch. The possibility of an Orbiter Vehicle (OV) actually landing at MCAS Cherry Point is extremely remote. Should an emergency landing occur, however, augmentation of forces will be necessary per reference (a).

3. Operations to be Conducted

a. Emergency Personnel. Prior to implementation of references (a) and (b), the DoD Manager, Manned Space Flight Support Operations, will provide annual training for all contingency force personnel, On-Scene Commander (OSC) and Airfield Support Coordination Officer (ASCO). The Orbiter Rescue Team (ORT) will form for first response to an emergency OV landing. The ORT will conduct emergency flight line and egress operations.

b. Reception/Bed Down of Forces. After landing, MCAS Cherry Point will prepare for the reception of NASA’s Rapid Response Team (RRT) and Deployed Operations Team (DOT). In total, approximately 600 NASA personnel and equipment will be on Station at any one time.

c. Information Disclosure. In the execution of this plan, Operations Security (OPSEC) and Communications Security (COMSEC)must be a matter of continuing concern to minimize disclosure of sensitive information.

d. Time to Commence Effective Operations. Upon tasking by DDMS directive via Pre-positioning Order message.

4. Command Relationships

a. The Commanding Officer of MCAS Cherry Point reports to the Commanding General, Marine Corps Installations East.

b. The Director of Operations for MCAS Cherry Point has host Station support responsibilities for all DoD forces stationed at, operating from, or transiting to MCAS Cherry Point.

c. The Airfield Management Specialist will assume the responsibilities of ASCO. The ASCO is the focal point for local DoD/NASA contingency support matters.

d. The Aircraft Rescue and Firefighting (ARFF) Officer in Charge (OIC)/Noncommissioned Officer in Charge (NCOIC) will assume responsibilities of the OSC. The OSC is the individual responsible for directing post landing shuttle contingency operations at MCAS Cherry Point.

5. Logistics Appraisal. Landing the Space Shuttle at MCAS Cherry Point is logistically feasible. Adequate ramp space exists for landing and post landing mating of the OV to ferry aircraft, plus cargo aircraft in support of the contingency. Sufficient office space, as well as furniture and connectivity will be provided within the existing means of MCAS Cherry Point.

6. Personnel Appraisal. MCAS Cherry Point will provide DDMS trained personnel to support emergency Space Shuttle landing requirements. ARFF, Structural Fire Department, Medical, Meteorological, Environmental, Communications, Audiovisual and Coordination personnel will be prepared to respond prior to and during both launch and landing events. These units will remain prepared until excused by the OSC. Post landing movement of the OV and preparation for ferry is a NASA operation supported by DoD personnel.

7. Impact Assessment of Limiting Factors. Currently identifiable support shortfalls and limiting factors arise primarily from MCAS Cherry Point maintaining a high operational tempo. Manpower, supply and facility shortfalls, which may inhibit optimal support in the event of an emergency landing, are as follows:

a. NASA/DDMS has temporary (Bare Base) assets that would arrive to fill this requirement if Station facilities are not available.

b. The only hardware that requires hanger space is the OV tailcone assembly and other fragile pieces. Space required is minimal and NASA/DoD can bring Bare Base assets to meet this requirement as well.

c. In the event of a medical emergency associated with an OV landing, Cherry Point Naval Hospital can only provide limited medical care, and limited surgical capability. Any serious injury would require emergency transport to Craven Regional Medical center, 20 minutes by ground or to Pitt County Memorial Hospital, approximately 90 minutes by ground or 30 minutes air travel.

BASIC PLAN

This plan assumes that the Rapid Response Team will respond within 24 hours of OV landing and DOT response within 72 hours.

1. Situation. MCAS Cherry Point has been identified as a possible Launch Abort Site (LAS) and an ELS should a situation develop which prevents an OV from landing at a planned site. An emergency landing can be made during the launch phase (launch abort), from on orbit or as a result of an overshoot when a Kennedy Space Center (KSC) landing was planned.

2. Mission. MCAS Cherry Point will be prepared to provide logistical support or execute preplanned contingency/emergency response operations. Support will be provided within the existing capabilities for OV crewmember rescue, fire fighting, MEDEVAC, and security to protect and preserve property.

3. Execution. DDMS will identify the need for contingency response operations through the ASCO. The ASCO will coordinate with units to respond in accordance with this plan, the DDMS Functional Plan (FUNCPLAN) and the Space Shuttle Procedures Document.

4. Administration and Logistics. MCAS Cherry Point units will follow normal channels for administration and logistics support. See DDMS FUNCPLAN and Space Shuttle Procedures Document. Base support provided to NASA is identified in enclosure (6).

5. Command and Signal. Reference DDMS FUNCPLAN (reference (a) and enclosure (9)).

TASK ORGANIZATION

Responsibilities. All units will follow the guidance and procedures outlined in the DDMS Space Shuttle Support FUNCPLAN, DDMS Procedures Document, and Turnaround FUNCPLAN, in addition to this plan. Be prepared to activate a recall plan of off duty personnel. Establish continuity folders, containing as a minimum, the DDMS Procedures Document and this Order.

1. Airfield Operations will coordinate launch notification with DDMS and provide services and facilities support, as required.

2. Airfield Management Specialist or the designated representative will act as the ASCO and act as the single point of contact for all Space Shuttle operations.

3. ARFF OIC/NCOIC or the designated representative will act as OSC and direct and monitor crash, fire, search and rescue (SAR) operations.

OPERATIONS

1. General. This enclosure provides guidance for the conduct of MCAS Cherry Point in support of Space Shuttle operations. Use this enclosure in conjunction with DDMS FUNCPLAN and DDMS Procedures Document. For MCAS Cherry Point, the three phases of support include:

a. Phase 1: MCAS Cherry Point identified as an ELS prior to and during launch.

b. Phase 2: MCAS Cherry Point becomes primary ELS for an OV landing.

c. Phase 3: Post OV landing operations.

2. Areas Of Operations. The MCAS Cherry Point local contingency area is defined as the area in the vicinity of the runway accessible by the ARFF Division Building 1791.

a. Inside this area, MCAS Cherry Point contingency forces will provide support for OV crewmember rescue, fire fighting, MEDEVAC, security to protect personnel and property, and environmental safety within existing capabilities.

b. Outside this area, MCAS Cherry Point is equipped for SAR operations and will provide support as necessary.

3. Concept of Operations

a. General. OV launches and recovery responsibilities are contained in the DDMS FUNCPLAN, DDMS Procedures Document and MCAS Cherry Point SSSP.

b. Execution. Execution of this plan will commence upon receipt of Department of Defense Manned Space Flight Support Office Force Pre-positioning Order.

c. Deployment. NASA personnel will not deploy to MCAS Cherry Point unless Phase 3 support is required.

d. Personnel. MCAS Cherry Point departments and organizations will provide support personnel, if available, to meet tasking requirements of DDMS FUNCPLAN.

e. Equipment and Facilities. Equipment and facilities for Phase 3 operations support listed in enclosure (6).

f. Employment. Phase 1 and Phase 2 support will be conducted with existing MCAS Cherry Point personnel and equipment. Phase 3 support will require deployed personnel.

g. Salvage Support. MCAS Cherry Point will cooperate with NASA/DoD officials to support salvage/recovery operations. MCAS Cherry Point contingency force personnel will take appropriate steps to protect life and property, as well as secure the site after OV landing. The OSC will control access and preserve evidence, but make no attempt to move the OV or parts from final resting positions. The NASA RRT and Mishap Investigation Team (MIT) are expected to arrive within 24 hours of OV landing. Upon MIT approval, the NASA DOT will devise a salvage plan.

h. Reports. During Phase 2 operations, ASCO will provide DoD/NASA real time situation reports (SITREPS) via telecom. ASCO will receive on going updates from the OSC. During Phase 3 operations, SITREPS will be provided via Air Operations staff.

4. Coordination and Control

a. Command Relationships. DDMS is responsible for notifying MCAS Cherry Point of Space Shuttle contingency tasking via an Operation Order Message, approximately 45 days prior to launch. At that time, the ARFF Division will notify applicable personnel and schedule meetings and training exercises.

(1) ASCO will be the primary communication, coordination and focal point for DDMS personnel through Phase 1 and Phase 2 operations. Ninety minutes prior to scheduled launch, the ASCO will establish hotline communication with the DDMS Support Operations Center (SOC) and provide required L-90 data to DDMS. At launch minus 15 minutes, the ASCO will again call the SOC and maintain communications throughout the launch until excused by the DDMS SOC controller. ASCO will also maintain contact with the OSC, who in turn will maintain contact with the MCAS Cherry Point ORT.

(2) During Phase 3 operations, NASA/DDMS personnel will be deployed to MCAS Cherry Point and assume responsibility for salvage and recovery of the OV. MCAS Cherry Point SITREP reporting will be coordinated through Airfield Operations staff prior to release.

b. Operations Centers. NASA's operations centers are the Kennedy Launch Control Center (LCC) and Houston Mission Control Center (MCC). The LCC controls operations up until lift off. Once off the ground, MCC is the controlling agency. DDMS operations are conducted throughout the launch and mission from the SOC at Patrick Air Force Base, Florida. The ASCO will be on line with DDMS SOC during pre-launch, launch, and post launch until excused. The MCAS Cherry Point ASCO will operate from the Air Traffic Control tower during launch operations.

c. On-Scene Commander. The ARFF OIC/NCOIC, or the designated representative, will act as the OSC for incidents involving the OV at MCAS Cherry Point. The OSC will direct actions to mitigate damage, save lives and provide on scene command and control to all responding forces.

5. Contingency Response Modes. The following modes will be used to identify specific Space Shuttle contingencies. These modes are those used by NASA.

a. Landing Modes

(1) Mode V. Landing mishap on or near runway requiring unaided egress from OV; however, ARFF aids OV crew escape from OV area.

(2) Mode VI. Landing mishap on or near runway requiring aided egress and aided escape. ORT will enter the OV to aid crew egress and escape.

(3) Mode VII. Landing mishap off the runway requiring aided egress and escape in a location not accessible to ground crews. ORT requiring helicopter transport could enter OV to aid crew egress and escape, if approved by the OSC.

(4) Mode VIII. OV crew bailout during controlled gliding flight or catastrophic breakup from which the crew compartment survives.

(a) Egress Condition Red. When a catastrophic condition exists posing a serious threat to life or limb of the rescue force, the NASA Test Director (through ASCO), Flight Director (through ASCO), or the OSC can declare Egress Condition Red. In the absence of additional commands, the ORT Leader will direct such action as necessary to ensure the safety of the rescue forces and the rescue of the OV crew. In the event of Egress Condition Red, the ORT may extract OV crewmembers if they are in their arms; otherwise, OV crewmembers must be left behind.

(b) Medical Condition Codes (MEDCODES). See enclosure (11).

6. Training and Exercises. In accordance with the DDMS FUNCPLAN, DDMS will conduct annual training for MCAS Cherry Point personnel. MCAS Cherry Point ARFF Division will coordinate all training requirements associated with the annual visit. Training will include Orbiter post landing operations, flight crew egress, hazard detection and assessment, etc. At the conclusion of the training, a flight line exercise will be conducted.

DoD ELS/LAS OPERATIONAL SUPPORT REQUIREMENTS

1. Situation. The OV has the capability to make an emergency landing at MCAS Cherry Point, North Carolina. MCAS Cherry Point's location and runway size make it useable as a high inclination launch ELS. MCAS Cherry Point has no "shuttle unique" landing aids installed. However, appropriate MCAS Cherry Point personnel receive annual training to assist with an emergency landing.

2. Area of Operation. See enclosure (4).

3. Concept of Operation. The chance of an OV landing at MCAS Cherry Point is extremely remote. However, should this occur, procedures discussed in enclosure (4) will be utilized. Upon notification of OV landing at MCAS Cherry Point, ASCO will relay all information to the OSC. The ORT will be pre-assembled in Building 1791 (ARFF) 90 minutes prior to a scheduled shuttle launch and landing. The DDMS FUNCPLAN ELS landing brief is located in enclosure (5). Specific recovery procedures can be found in the Procedures Document.

4. Alert Requirements/Notification Times

a. In-Place Requirements

(1) The MCAS Cherry Point ASCO will be in contact with the SOC not later than L-90 minutes, or as directed by DDMS during pre-launch communication.

(2) The ORT will pre-assemble in Building 1791 (ARFF) 120 minutes prior to a scheduled launch. MCAS Cherry Point rescue personnel will move to the flight line immediately upon notification of OV emergency from the OSC. Once forward positioned, all vehicle movement will cease until after the OV lands.

b. Notification Times

(1) The MCAS Cherry Point ASCO will be in constant communication with the SOC prior to and during a launch and landing until dismissed by the SOC. The ASCO will initiate communication with SOC not later than 90 minutes prior to launch

via DSN (flash precedence if necessary). Immediately upon notification, the MCAS Cherry Point ASCO will notify the control tower, which in turn will notify the ORT via the primary crash net.

(2) The suggested response time for the ORT to position on the flight line is three minutes. MCAS Cherry Point will receive a minimum of seven minutes launch abort notification.

5. Operational Requirements

a. Landing Support Operations

(1) Airspace Clearance. On launch date, ASCO will confirm through the tower supervisor that airspace has been dedicated at launch time.

(2) Dedicated Runway. The same procedures as above will be used to dedicate the runway at launch time.

(3) Tower Operations. See enclosure 13, Air Traffic Control Facility Manual.

(4) Runway Lighting. Runway, approach, and strobe lights will be positioned IAW the DDMS Procedures Document. Runway approach and strobe lights will be on at L-5 minutes for runway 32. However, runway 14 does not have approach or strobe lights. Ensure SOC is aware of runway 14 limitations as early as possible if runway 14 is the active runway during a launch.

(5) Communications. Primary contact with the OV will be on UHF 243.0 MHz. Due to the distance involved, real time monitor of air/ground communication between MCAS Cherry Point tower and OV crew may not extend to NASA MCC. In this case, the ASCO will monitor UHF communications from the tower post and relay data to the SOC via telecom. MCAS Cherry Point tower will not initiate air/ground communications but should be ready to respond to communication from the OV and record all communication with the OV.

b. Runway Emergency Support. Should the OV land at MCAS Cherry Point, the ORT, which includes ARFF, Structural Fire Department, and Medical support personnel, will respond immediately.

NOTE: If the OV lands using runway 32, the ORT will remain at the ARFF Building 1791. If the OV lands using runway 14, the ORT will immediately assemble in front of ARFF, adjacent to KILO taxiway. The OSC will be notified of the situation by the ASCO. All personnel responding to the OV landing must be thoroughly familiar with the DDMS Procedures Document.

c. Aircraft Rescue and Firefighting Support. The following minimum support will be provided by MCAS Cherry Point ARFF:

(1) 30 to 35 ARFF support personnel, four major ARFF vehicles (P-19) and one rescue vehicle equipped with the following:

(a) Twenty-Four foot ladder.

(b) One half inch square drive ratchet or breaker bar.

(c) Three-eighths inch diameter pointed wrecking bar.

(d) High intensity cyalume light sticks.

(e) Two safety belts with 5 ft, lanyard and carabineers.

(f) Extraction straps, decent rope and 8 sets of leg and wrist straps.

(2) Additional equipment must be supplied by NASA.

d. MCAS Cherry Point Fire Department. The following minimum support will be provided by MCAS Cherry Point Fire Department:

(1) Fourteen on duty support personnel.

(2) On-duty Assistant Fire Chief with support vehicle.

(3) Hazardous Materials Support Unit with the following capability:

(a) Utilize level “A” suits.

(b) Full decontamination set-up capabilities.

(c) Various monitoring and detection equipment specifically able to draw readings off specified chemicals found within Enclosure 11.

(d) One 1000 GPM pumper with four-man crew and 50 ft telesquirt (boom).

(e) One 1000 GPM pumper with four-man crew.

(f) One 1250 GPM pumper with four-man crew.

(g) One Heavy rescue vehicle.

(h) One ALS equipped Ambulance.

e. MCAS Cherry Point Naval Hospital Medical Support. The medical primary response team will be part of the ORT and include personnel identified in enclosure (11) of this Order.

f. Supplemental/Follow-On Support

(1) Search and Rescue (SAR) Support. MCAS Cherry Point has operational SAR capability. DDMS Contingency FUNCPLAN identifies NASA and DoD forces required for support.

(2) Security Support. The MCAS Cherry Point PMO will provide support by means of the employment of its Special Reaction Team (SRT). The SRT will provide perimeter security, by means of a six to eight man security element along with a mobile command post. The SRT will also coordinate and man an access control point to the incident site. If required, augmentation personnel from the on duty military police section may be called upon to assist with all security and access concerns.

(3) Hazard Assessment. Hazard assessment will be conducted by the Bioenvironmental Team as soon as possible at the OSC’s direction.

(4) Weather Support. See enclosure (8) of this plan.

(5) Photography. Crash Photo will support a Space Shuttle Contingency to the fullest extent possible. Crash Photo will ensure an alert photographer is on telephone standby for all OV launches. The photographer will be pre-positioned to record still picture coverage of an OV landing and post-landing operation.

(6) Facilities Maintenance. The Facilities Maintenance Division will provide one truckload and one driver to deliver sand for spill containment of hazardous materials. The driver will be outfitted and certified to use SCBA’s during an OV emergency.

(7) Visiting Aircraft Line (VAL). The VAL department will have a B-7 ladder standing by as well as required personnel to transport this staged equipment 90 minutes prior to scheduled launches and landings.

LOGISTICS SUPPORT REQUIREMENTS

1. General

a. Upon OV landing at MCAS Cherry Point, a RRT followed by a DOT will be deployed. The RRT, which includes the MIT, will take immediate control of the OV (i.e., safe/deservice/tow operations) and NASA management personnel who will begin turnaround operations. The RRT will provide expertise necessary to return the runway to operational status as soon as possible and start ground turnaround procedures.

b. The NASA team will brief the Commanding Officer, MCAS Cherry Point on specific ground turnaround activities and procedures. MCAS Cherry Point will provide identified support within capabilities.

c. The OV will not be towed by MCAS Cherry Point personnel unless requested and supervised by NASA.

2. Orbiter Processing and Support Area/Facilities

a. Safing/Deservicing Area. The OV is safed and deserviced in this area. This area is designated a controlled access area upon OV arrival until it is removed.

(1) Foxtrot taxiway.

(2) A 1250 foot radius explosive hazard/toxic vapor danger area will be established around the OV once it enters this area.

(3) Must be able to support 315 psi footprint pressure.

b. Orbiter Protective Enclosure (OPE) Area

(1) Foxtrot Taxiway 7100 foot by 400 foot.

(2) This area must be a minimum of 300 foot by 200 foot.

(3) Must be able to support 315 pounds per square inch footprint pressure.

c. Mate/Demate Area. An area where the OV is mated to the Shuttle Carrier Aircraft (SCA). Two large cranes are used for the mating operation. The OV must be towed to this location. This area is designated a controlled access area upon arrival of the OV and will remain such until it departs.

(1) Foxtrot Taxiway 7100 foot by 400 foot.

(2) This area must be a minimum of 200 foot by 200 foot.

(3) Must be able to support 315 pounds per square inch footprint pressure.

(4) Accommodate SCA (B-747) entry and exit.

d. Staging/Assembly Area. OV operations will require a controlled access staging area with a hard surface capable of supporting heavy equipment, including yard cranes. This area should be close to the mate/demate area, at least 700 ft from the safing/deservicing area, and lit for night operations. Organic assets are available to provide portable lighting for this area.

e. Facilities Required. The following facilities will be selected and coordinated after the arrival of the NASA team.

(1) Operational/Support Facilities. Twelve thousand square feet environmentally controlled.

(2) Equipment Storage/Processing Facilities. Ten thousand total square feet for equipment storage/processing.

(3) Orbiter GSE/Tailcone. Hangar space 32 foot high by 30 foot wide by 35 foot long to assemble the OV tail cone.

(4) Payload Storage/Processing Facility. Secure covered enclosure to store and process payload items 60 foot by 15 foot. Vertical deservicing of hazardous materials may be required.

(5) Technical Supervision/Control Facility. Transportable shelter for up to six DOT personnel plus DOT provided communications equipment. This unit may be a trailer like unit and will be moved upwind of the safing/deservicing area and the vicinity of the mate/demate area.

3. Vehicle And Ground Handling Equipment. Vehicles and equipment specified in the DDMS FUNCPLAN will be provided to the extent they are available based on mission requirements.

4. Services, Equipment, Supplies, and Personnel. The services specified in the DDMS FUNCPLAN will be provided to the extent they are available based on mission requirements.

5. Aircraft Support. Ferry aircraft and their crews will be supported as required.

PUBLIC AFFAIRS

References:

a. Secretary of Defense Memorandum, 15 October 1996 (Assignment of Responsibilities of the DoD Manager, Manned Space Flight Support Operations).

b. Joint Chiefs of Staff Memorandum, DJSM-1226-96, (Assignment of Responsibilities of the DoD Manager, Manned Space Flight Support Operations).

c. Agreement between the National Aeronautics and Space Administration (NASA) and the DoD on Joint Public Affairs Policy for the Space Transportation System, September 1982, subsequent agreement signed December 1984, and subsequent public affairs implementing plans for each DoD dedicated Space Shuttle Mission.

d. DoD Secure Shuttle Operations Security Classification Guide, 22 February 1991.

e. Inter-Service Support Agreement (ESM No.15D-1-13), 10 October 1990.

1. General

a. This enclosure provides specific guidance for public affairs (PA) personnel in support of Space Shuttle Operations.

b. In the event of a Space Shuttle contingency landing at MCAS Cherry Point, a designated military Public Affairs Officer will maintain liaison with the OSC and will serve as spokesperson to the media and the public. An initial media alert will be released to all local media within 10 minutes of notification of a contingency landing. All subsequent releases will be coordinated with Office of the Secretary of Defense for Public Relations and NASA Public Affairs. All inquiries will be directed to the Media Branch of the MCAS Cherry Point Public Affairs Office. Under normal circumstances, the designated officer will be the Media Officer or Media Chief of the MCAS Cherry Point PAO.

c. Upon arrival of the NASA DOT, the designated NASA Public Affairs Officer will assume the role of spokesperson concerning the OV and crew. Access to the OV and crew will be dictated by the restrictions of the safety and security officials.

d. In all cases, inquiries of a political nature will be referred to the appropriate diplomatic post.

e. Telephonic communication will be established and maintained between the MCAS Cherry Point PAO, OSD/PA and NASA/PA at Patrick Air Force Base, Florida. This communication link will provide easy access for forwarding guidance and informational materials.

2. Tasks and Responsibilities

a. The Secretary of the Air Force, Office of Public Affairs (SAF/PA), is the final authority for military public affairs policy decisions concerning the Space Shuttle. The provisions of this enclosure are subject to and may be modified by mission-specific plans developed and published by the SAF/PA.

b. In the event of an OV landing at MCAS Cherry Point, guidance from JSC/PA will be provided through the SOC until a NASA/PA representative arrives on the scene.

c. Upon notification of a possible OV landing, MCAS Cherry Point PA representatives will establish a News Media Center for all media representatives at the Base Operations building located at the base of the Air Traffic Control Tower.

d. Still and video camera crews will have the opportunity, per NASA public affairs policy, to cover all aspects of the approach, landing and post-landing. Acceptable locations for coverage will be identified by Air Operations. The minimum safe range for observers and media representatives will initially be 1250 feet. A reduction in minimum range will be decided on and announced by NASA safety personnel.

e. Telephone lines will be made available in the News Media Center for use by the media representatives. Media representatives will be met at the gate and escorted to the News Media Center and signed in. They will be escorted at all times while on base.

f. Unit Information Officers will be called in as needed to augment the PAO in dealing with media representatives.

g. Request a 28 passenger bus and driver, or two 15 passenger vans with drivers from Station or Wing Transportation.

h. Assist in providing logistical support for NASA/PA personnel.

i. Make releases and/or convey information for release regarding local site activity concerning the contingency following coordination with NASA/PA.

j. Refrain from releasing any information about the Space Shuttle, its crew or payload, without express and specific authority from NASA/PA.

METEOROLOGY

1. General

a. This enclosure provides guidance to MCAS Cherry Point weather personnel in support of Space Shuttle operations.

b. Upon declaration of an emergency deorbit, use HPAC software to compute toxic corridors based on current and forecast weather conditions and the worst case scenario described below. Pass toxic corridors to the OSC.

Release Type	Continuous
Chemical	Nitrogen Tetroxide
Height of leak	30 feet
Emission rate	80 pounds per minute
Chemical leaking	Yes
Spill area	800 square feet
Concentration	15 minutes
Default height	6 feet

2. Tasks and Responsibilities

a. Provide forecasts and observations from existing in-place resources to support an emergency landing of an orbiter as normally provided for any aircraft emergency.

b. Provide forecasts, observations, and metwatch support as directed, post-landing, by the OSC.

COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS

1. General

a. Command and Control. The overall responsibility for Space Shuttle mission activities rests with NASA. To carry out these responsibilities DoD has tasked the DoD Manager, Manned Space Flight Support Operations. The DoD manager will exercise control over the DoD support forces, facilities and assets to support Space Shuttle contingency operations.

b. Communication Systems. MCAS Cherry Point will utilize the contingency net (ARFF emergency freq.) for primary communications between the OSC, ASCO, Fire Chief and Security Forces. These individuals will in-turn relay information and/or instructions using their own net.

2. Specifics. The following functions/elements have been identified as ORT emergency response:

CONTINGENCY AGENCY	**CALL SIGN**
On Scene Commander	OSC
BIO	BIO
Fire Chief	8-0 (eight zero)
Rescue Van	Team Leader
ARFF	CP-39, CP 41-44, 50-59
Fire Department	Engine 1-3, Rescue 1
Medical	Medical
Crash Photo	Crash Photo
Environmental	EAD
Military Police	SES
Facility Maintenance	FAC Maintenance

3. Tasks and Responsibilities. DoD ELS Commanders will:

a. Prepare facilities to accept, terminate, and extend FLASH DSN as requested by DoD Communication Coordinator.

b. Provide teletype communications in accordance with paragraph 5, ANNEX K, DDMS FUNCPLAN 3610.

c. Notify the Communications Coordinator of any problems with ELS communications.

d. Provide post-landing communications support as shown in Turnaround FUNCPLAN 3611, ANNEX K.

e. Record orbiter/tower UHF communications.

SECURITY

References:

a. DoD Directive 5210.56, Use of Force by Personnel Engaged in Law Enforcement and Security Duties, 25 February 1992.

b. Chairman Joint Chiefs of Staff Instruction, CJCSI 3440.01, 1 November 1996, Subject: Space Shuttle Contingency Policies and Procedures.

c. NASA Launch and Landing Program Requirements Document (PRD) No. 2000.

d. NASA Policy Directive NPD-1600.2, National Resource Protection Program, April, 1998.

e. DoD Directive 5200.8, Security of Military Installations and Resources, 25 April 1991.

f. Internal Security Act of 1950 (50 U.S.C. 797).

g. AFI 31-101, The Air Force Physical Security Program, 1 September 1998.

h. DoD Secure Shuttle Operations Security Classification Guide, Headquarters, Space and Missile Systems Center, 22 February 1991.

i. CJCSI 3121.01, Standing Rules of Engagement, 1 October 1994, as amended.

1. General

a. Security operations in support of the Space Shuttle can be divided into several categories (i.e., protection of high priority national resources, protection of classified payloads, local traffic/crowd control, and security for safety reasons). The orbiter and the SCA require special protection because they are high visibility national assets. Security support plans must provide for positive and complete control over a designated orbiter restricted area in order to prevent overt, covert, clandestine, or any other unauthorized entry into the area. The

orbiter and its critical support facilities and equipment must be provided a level of protection to ensure that hostile forces, seeking to damage or destroy a resource, are intercepted and overcome.

b. The use of force by security forces on DoD installations will be in accordance with appropriate command directives. Normally, security force personnel shall use the minimum degree of force necessary, up to and including deadly force, to prevent damage, loss, or compromise of Space Shuttle mission critical components. Deadly force shall be used as a last resort after all other means have failed.

2. Emergency Landing Sites

a. The local host installation commanders are responsible for implementing security support activities within the confines of their respective installation. Specified support to meet security requirements will be provided initially with existing resources in accordance with the provisions of the FUNCPLAN 3610.

b. The local host installation security officers are responsible for ensuring effective and timely coordination with local law enforcement agencies/host country officials to provide security in the event an orbiter crash occurs off the installation, but within the accepted local SAR area. Security operations within this area will be conducted IAW the provisions of local disaster preparedness plans and applicable local/host country agreements. Additional forces to augment local security may be requested, if necessary, through the SOC at (DSN 467-9161).

MEDICAL SERVICES

References:

a. FUNCPLAN 3610.

b. DoD Manager's Space Shuttle Support Training Plan, 1 January 2004.

c. DDMS Space Shuttle Medical Personnel Guide (Rev 9, 2002).

1. General. MCAS Cherry Point is designated an alternate ELS for the Space Shuttle OV. In accordance with the above documents, the Emergency Medical Services, Marine Corps Air Station Cherry Point Fire Department and the Naval Hospital Cherry Point will support this contingency. This enclosure outlines the Medical Contingency Response Plan.

2. Assumptions. The choice for an OV landing at MCAS Cherry Point presumes onboard malfunction, failure, or emergency; the nature of which will determine the medical response. If the OV should land at MCAS Cherry Point, the prime danger to the flight crew and rescue personnel will be direct trauma and exposure to hazardous materials.

3. Mission. To medically support the rescue operation. Support will be in the form of detection of hazardous materials, decontamination of the flight crew and contaminated personnel, medical treatment and transport of injured personnel.

4. Concept of Operations

a. The Marine Corps Air Station Cherry Point Fire Department (CPFD) Department Head (DH) will coordinate and oversee the medical response. The assigned Flight Surgeon will be the On-Scene Medical Commander.

b. Industrial Hygiene (IH) will research possible hazard exposure, detect hazards at the landing site and advise the OSC on decontamination and precautions.

5. Procedures

a. As early as possible prior to each scheduled Shuttle Mission, the ARFF Chief will notify the CPFD DH, the Naval Hospital Flight Surgeon, and the 2d MAW Surgeon of the mission and the projected date and time of the upcoming launch. The CPFD DH and the Flight Surgeon will attend the Shuttle Brief, scheduled by ARFF. Important information for EMS is the number of flight crew members on board and any unusual payloads that might present a hazard. The CPFD DH and the Naval Hospital Flight Surgeon are responsible for relaying pertinent information back to their respective organizations in preparation for a possible contingency. Naval Hospital Flight Surgeon is also responsible for notifying the Carteret General, Craven Regional and Pitt County Hospital Emergency Departments. The Flight Surgeon will communicate any known hazardous materials information, coordinate necessary training, and monitor emergency room bed status at these hospitals during a shuttle launch.

b. Immediately upon receiving this brief from ARFF, the CPFD DH will generate a roster identifying two Emergency Medical Technicians per flight crew member.

c. The assigned team members for the medical response team will receive a pre-shuttle launch brief from a CPFD EMS representative at least 24 hours prior to the scheduled launch. This brief will cover routine operating procedures for the launch response, as well as any specific information passed on at the ARFF brief.

d. At least two hours prior to a scheduled launch, one CPFD ambulance with crew, will proceed to the ARFF building (Bldg. 1791) where they will join the convoy staging. The remainder of the EMS crew will stand by in the EMS station for immediate recall for a contingency response.

e. The CPFD ambulance in the convoy will monitor both the Hospital 1 frequency and the ARFF emergency frequency. Operational control at that point rests with the OSC and the Flight Surgeon as Medical On-Scene Commander.

f. All communications on the radio will utilize Medical Condition Codes (MEDCODES) to provide secure communication. Medical Personnel will use the following codes to relay the medical condition of OV crew members and/or injured rescue personnel during contingency support operations.
DO NOT AMPLIFY MEDICAL CONDITIONS BEYOND THESE CODES UNLESS SPECIFICALLY REQUESTED BY NASA/DDMS MEDICAL PERSONNEL OR IF NEEDED TO ENSURE PROPER CARE OF THE PATIENT:

(1) MEDCODE 0. Patient severely injured beyond reasonable expectation of survival or deceased.

(2) MEDCODE I. Condition critical, patient requires immediate care and evacuation.

(3) MEDCODE II. Condition fair to poor, patient's need for care is not so acute, but will require care before evacuation.

(4) MEDCODE III. Condition good to fair, patient with injuries which do not require hospitalization; some medical care may be needed, but not on a time critical basis.

g. In the event a mission does land at MCAS Cherry Point, suit removal will be accomplished per DDMS Procedures Document.

h. Specific hazards relating to payloads will be discussed in the pre-shuttle launch brief at ARFF. The following outlines routine hazards associated with orbiter access:

CHEMICAL	CHARACTERISTIC	USE	AMOUNT IN Pounds
Monomethylhydrazine	Flammable/Toxic	Propellant	1,796
Hydrazine	Flammable/Toxic	APU	490
Nitrogen Tetroxide	Acid Forming/Toxic	Propellant	2,945
Anhydrous Ammonia	Caustic/Toxic	Coolant	98
Liquid Hydrogen	Flammable/Cryogenic	Fuel Cells	160
Liquid Oxygen	Oxidizer/Cryogenic	Fuel Cells	1,376

i. Naval Hospital Cherry Point can only provide limited medical care, and limited surgical capability. Any serious injury would require emergency transport to Craven Regional Medical Center, approximately 20 minutes by ground, or Pitt County Memorial Hospital, approximately 90 minutes by ground or 30 minutes by air. Non-life threatening emergencies can be seen by the Naval Hospital, Craven Regional, or Carteret General Hospital Emergency Rooms.

EXECUTION CHECKLIST

1. General. This enclosure outlines major events that occur when the DoD Manager executes the FUNCPLAN. The checklists are intended to be used as a quick reference for tasked organizations to relate actions specified in the FUNCPLAN with the launch/landing sequence. Actions taken by the DoD Manager or NASA have been added for continuity. The checklists do not cover second generation events or actions that may be required as a result of the tasking. Follow-on requirements are specified in the DoD Manager's Space Shuttle Support Turnaround Functional Plan 3611-01.

2. Execution Checklist (Mission):

TIME	ACTION	AGENCY
L-45 Days	Receive Operation Order	DDMS
L-45 Days	Send Operations Order To Execute Plan	DDMS
L-10 Days	Organizational Readiness Report Due From Tasked Landing Sites	See Annex P of ref (a)
L-24 Hours	SOC Begins 24 Hour Operations	DDMS
L-24 Hours	Direct All Incoming Operational Calls to SOC	All DoD
L-90 Minutes	ASCO Provide Airfield Status Report to DDMS SOC	DDMS
L-30 Minutes	DoD Support Forces in place at Tasked Landing Sites	All DoD
L-15 Minutes	ASCO Calls SOC and Maintains Communications Until Released	
L-10 Minutes	Launch Site Contingency Forces in place	All DoD
L-0 Minutes	Orbiter Launch Sequence	NASA
L+10 Minutes	DoD Support Forces Released from Launch Support (Nominal Launch)	DDMS

Note: After Orbital insertion, DoD supporting organizations will maintain appropriate posture to support landing contingencies and report any status change to the DoD Manager in accordance with Annex P of the FUNCPLAN 3610.

AIR TRAFFIC CONTROL (ATC) FACILITY MANUAL (SECTION 3)

1. GENERAL

a. Cherry Point's ATC role in this operation is one of keeping other aircraft out of the way of the OV. NKT will provide information to the OV only when requested by the crew. Our main focus is to provide a clear profile and landing area.

b. Once the ASCO states there is an abort and the below listed tasks are complete, our main ATC function is to keep other aircraft out of the profile area. Additionally, ATC may be required to respond to other requests prior, during and after an abort landing not only from the crew but from the ASCO and others.

c. Please keep in mind that once the ASCO has the airfield, from prior to launch to stand down, he/she is our shuttle point of contact and any questions should be directed to the ASCO.

d. If there is an actual abort, inform the ATCFO as soon as possible so that other notifications can be made.

Home - After Hours
Work - 466-4123
Intercom - 17

2. PREPARATIONS

a. Two hours prior to launch - Place the following on the ATIS:

"Cherry Point is preparing for possible space shuttle divert. Launch time is scheduled for (time) Zulu."

b. One hour prior to launch:

(1) All E-28 gear removed.

(2) Convoy vehicles assembled at ARFF.

(3) ASCO located in Control Tower.

(4) Crash circuit "A" test.

(5) Coordinate with the ASCO for the runway to be used for an abort.

c. Thirty minutes prior to launch:

(1) Tower Supervisor shall ensure that the IVCSS is configured for Map 2 at positions 19 and 20.

(2) At a minimum, a local controller shall be assigned to monitor shuttle and emergency frequencies at position 19 or 20 until relieved from shuttle launch abort status by the ASCO.

d. Cherry 40, OSC, will assume responsibility of the airfield once authorized via the TS by the ASCO.

e. The ASCO will bring his/her own communications equipment, telephone and headset.

3. ABORT PROCEDURES

a. When notified by the ASCO that the shuttle will abort:

(1) Broadcast over crash circuit "A", PA system and 140.025 as follows:

"This is the tower with an emergency, this is the tower with an emergency, standby for shuttle launch abort to Cherry Point."

Ensure that Cherry 40 acknowledges on 140.025.

(2) Set runway lights to step 5 for day landing, or step 3 for night landing.

b. Turn VASI/OLS off.

c. Set strobe lights.

Night and dusk - Off
Day visibility >10 - Off
Day visibility <10 – On

d. Turn approach lights off.

e. Restrict movement of aircraft/vehicle on runways and warm-up areas to emergency response vehicles only.

f. Clear approach control and CDSA of traffic within thirty (30) miles from the center of NKT to include all of R-5306A, R-5306C and W-122D. See Figure 9-3-1 for flight profile.

Note: Upon turning toward NKT, the shuttle will approach from the Southeast above FL400 at mach speeds and execute a steep spiraling descent to the airport. Because there are many variables involved, it is virtually impossible to develop a standard list of priorities or actions that would apply uniformly to shuttle launch aborts. Each set of circumstances must be evaluated on its own merit. Controllers shall exercise their best judgment based upon the facts and circumstances known to them. That action which is most critical from a safety standpoint is performed first.

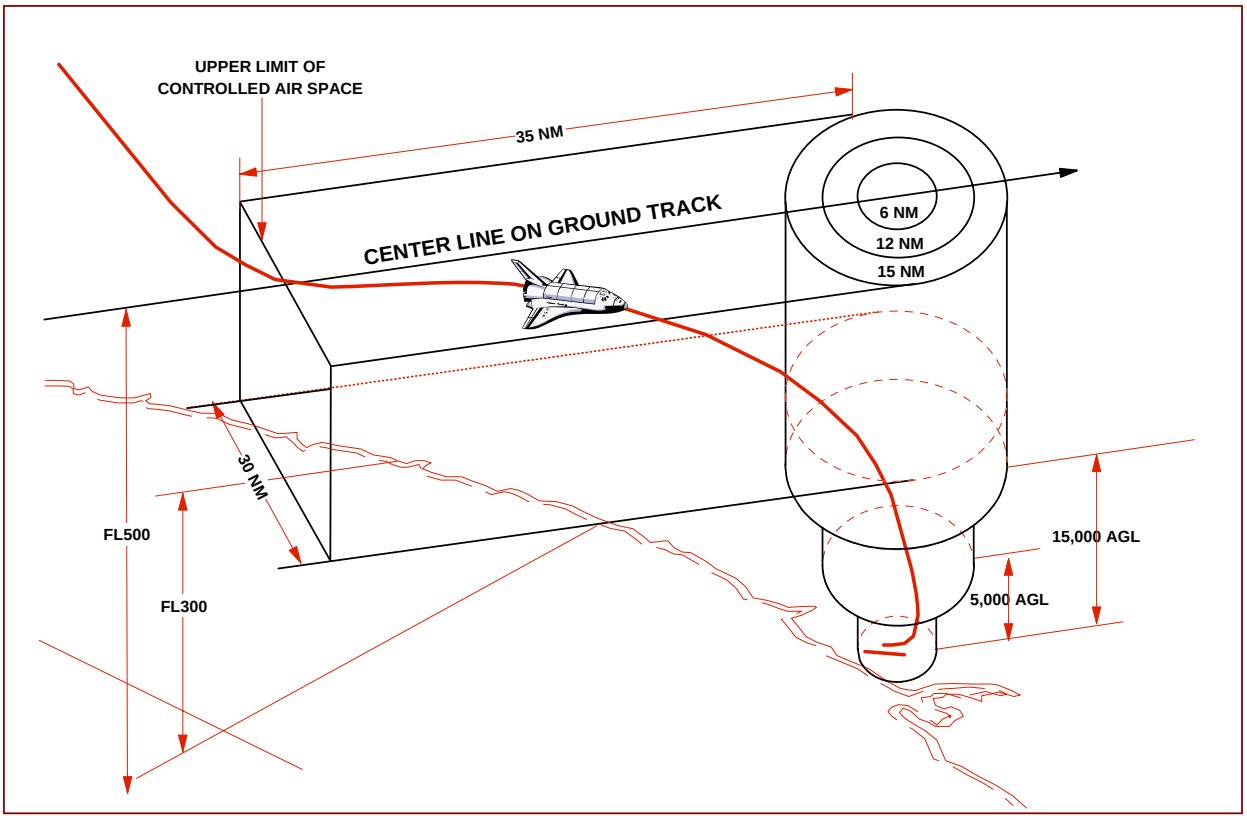

Figure 9-3-1. Flight Profile

ENCLOSURE (13)

g. Notify the MRH Fixed Base Operator (252) 728-1777, and RDU FSS 1-800-922-7433 to advise aircraft on appropriate frequency to avoid Alert Area 530 until further notice.

h. Notify NJM and NCA to cease operations until further notice.

i. Notify Camp Lejeune Range Control to cease-fire in special use airspace under their jurisdiction.

4. STAND DOWN. When notified by the ASCO to stand down from a successful launch or an abort, broadcast the following on the crash circuit "A," PA system, and 140.025.

"This is the tower securing from shuttle operations, this is the tower securing from shuttle operations, all facilities return to normal operations."

5. COMMUNICATIONS

a. Frequencies at positions 19 and 20.

Frequency	**Remarks**
140.1	Vehicle Net
140.025	Emergency Net
243.0	UHF Guard
282.8	Shuttle Comm (secondary)
259.7	Shuttle Comm (primary)
380.8	Ground Control
339.6	Trojan (R5306)
VHF	(As Requested)

b. Frequencies for Command Paddles vehicle.

Frequency	**Identification**
354.9	ATIS
380.8	Ground Control
340.2	Tower Shuttle Comm (secondary)
259.7	Shuttle Comm (primary)